# **Chapter 4 Population**

This chapter was prepared for the City by the staff of the Hampton Roads Planning District Commission in October, 2005

The character of a city's population can help predict future development patterns, and when studied over time can act as a valuable planning tool for a community making decisions related to growth. Future land use patterns are based on the trends seen in the existing community, and involve an assessment of the need for housing, schools, public facilities, infrastructure, and other services. The City of Williamsburg is both an important tourist destination and a college town, which influences the character of the City and its residents

Using data from the U.S. Census Bureau, the Hampton Roads Planning District Commission, and local records, the following chapter examines the most recent population estimates, population growth trends, and household information for the City of Williamsburg. The City is also part of a larger fast-growing region that includes the counties of James City and York. Both of these counties have experienced tremendous growth in recent decades, particularly in residential areas. In order to understand the dynamics affecting growth and development within the City of Williamsburg, this chapter will also examine regional trends in population and housing.

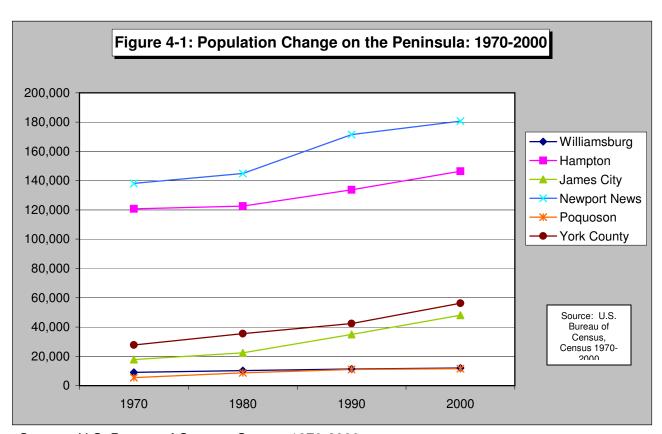
## POPULATION GROWTH

The City of Williamsburg is located on the Peninsula of Virginia, which includes four cities and two counties. Table 4-1 shows that the Peninsula's population grew at a rate of 12.6% from 1990 to 2000, slightly below the national average of 13% for the same period. The cities of Hampton and Newport News dominate the lower end of the Peninsula, and 72% of the population lives there. Figure 4-1 illustrates the population growth patterns of the Peninsula localities from 1970 to 2000. Although the smaller cities of Williamsburg and Poquoson showed slow rates of growth relative to the other localities, their collective population growth was about 62% over the thirty-year period. The cities of Hampton and Newport News experienced a cumulative growth rate of only 25% during that time.

The City of Williamsburg is separated from the larger Peninsula cities and is influenced to a greater degree by the two rapidly growing counties that surround it: James City and York. Together the three localities comprise a region that more than doubled its population during the thirty-year period from 1970 to 2000, due in large part to the robust 169% growth rate in James City County and the nearly 103% growth rate in York County. In the ten-year period from 1990 to 2000, the Williamsburg region experienced a 31% growth rate. Although the United States saw its largest ever population increase during that decade, according to the U. S. Bureau of the Census, the Williamsburg region grew at more than twice the rate of the rest of the country.

Both James City and York are predominantly suburban counties, and both have experienced significant population growth over a period of several decades. While the population growth in these counties helped propel population growth in the Williamsburg region from 54,684 in 1970 to 116,387 in 2000, the City of Williamsburg experienced a slower growth rate. The 2000 Census reported a city population of 11,998, which represented an increase of 5.2% over the 1990 Census population of 11,409 as shown in Table 4-2. Although the City continues to grow, recent figures represent a marked decrease from a growth rate of 10.8% from 1980 to 1990 and 13.5% from 1970 to 1980.

Table 4-1: Population Change on the Peninsula											
		CHANGE, 1990-2000									
	1970	1980	1990	2000	Number	Percent					
Williamsburg	9,069	10,294	11,409	11,998	588	5.2%					
Hampton	120,779	122,617	133,811	146,437	12,626	9.4%					
James City	17,853	22,339	34,970	48,102	13,132	37.6%					
Newport News	138,177	144,903	171,439	180,697	9,258	5.4%					
Poquoson	5,441	8,726	11,005	11,566	561	5.1%					
York County	27,762	35,463	42,434	56,297	13,863	32.7%					
Peninsula	333,140	364,449	435,197	489,877	54,680	12.6%					
Hampton Roads	1,108,393	1,213,999	1,454,183	1,575,348	121,165	8.3%					
Virginia	4,651,448	5,346,797	6,015,100	7,078,515	1,063,415	17.7%					

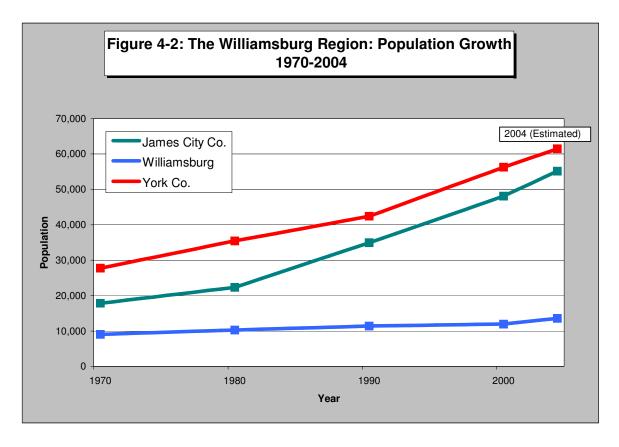


Source: U.S. Bureau of Census, Census 1970-2000.

Population estimates available from the Weldon Cooper Center for Public Service at the University of Virginia indicate that the pattern of growth may have changed since 2000. From 2000 to 2004, Figure 4-2 estimates that the growth rate in James City County has remained steady at 3.7% annually (unchanged from 1990 to 2000), while the growth rate declined appreciably in York County to 2.3% annually. In the previous decade, York County grew at average annual rate of 3.4%. However, Williamsburg's growth rate is estimated to be much higher now than in the previous decade. Growth in the City is estimated at an average annual increase of 3.3% for the four-year period from 2000 to 2004, up significantly from the .05% annual growth rate seen from 1990 to 2000. James City County's population is estimated at 55,200 in 2004, up a total of almost 15% from 2000; York County's population is estimated at 61,500, up about 9% from 2000. Williamsburg's population is estimated at 13,600 in 2004, up an estimated 13% or 1602 persons over the 2000 Census (Table 4-2).

Table 4-2: The Williamsburg Region: Population Growth 1970-2004											
	1970	1980	1990	2000	2004 (Estimated)						
James City Co.	17,853	22,339	34,970	48,102	55,200						
Williamsburg	9,069	10,294	11,409	11,998	13,600						
York Co.	27,762	35,463	42,434	56,297	61,500						
Peninsula	333,140	364,449	435,197	489,877	502,300						

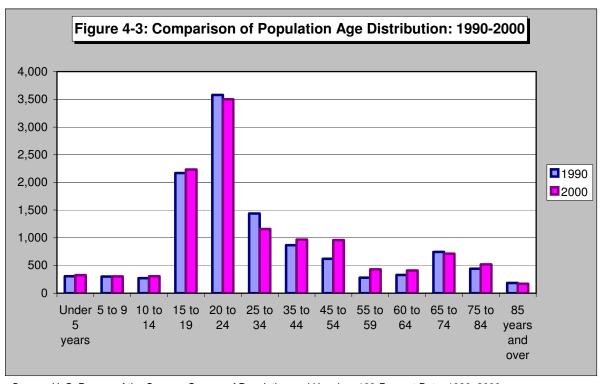
Source: Population Estimates for Virginia's Counties and Cities, Weldon Cooper Center for Public Service, University of Virginia



## POPULATION CHARACTERISTICS

#### Age

In the City of Williamsburg, the population is highly concentrated within two age groups: the college age group (ages 18-24) comprises 46% of the total population, while approximately 12% are 65 or older. Exhibit 4-1 at the end of the chapter shows the distribution of the population by median age. Residents age 50 and older dominate the southwestern part of the City, while residents in the areas around the College of William and Mary fall primarily in the 18-24 age groups. Figure 4-3 compares the age distribution of the City's population in 1990 and 2000. Significant increases are shown in the 45-64 age groups, indicating that the number of retirement-age residents is likely to show a marked increase in 2010. The aging of the general population will also have an effect on the City. The 65 and over population accounts for a significant percentage of the City population when the data is adjusted for full time permanent residency. There are 1,404 persons who are 65 or older living in the City, making up more than 21% of the City's non-student population of approximately 6,600. The proportion of permanent residents over the age of 65 is significantly higher in Williamsburg than in the surrounding region (13.9%), Hampton Roads (10.9%), or the State (11.9%). Exhibit 4-2 at the end of the chapter indicates that the 65 and over population lived in many of the same areas in the City in both 1990 and 2000, and that few lived in the downtown area.

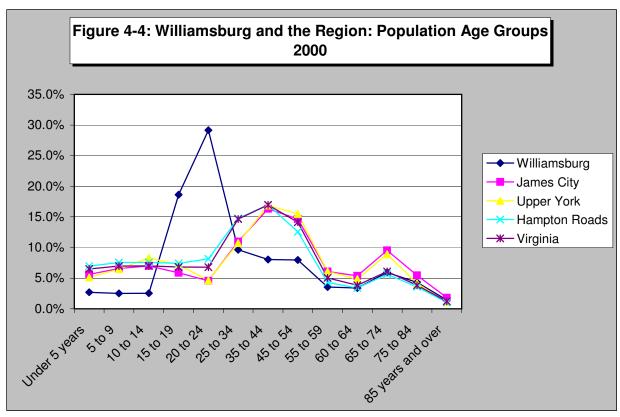


Source: U. S. Bureau of the Census, Census of Population and Housing, 100-Percent Data, 1990, 2000.

As the "baby boom" generation ages, the 65 and over age group will continue to grow as a segment of the overall population. Marketing to retirees or soon-to-be retirees has been prevalent in Williamsburg throughout the 1990s, and continues into the 2000s. Condominium construction, which is popular with this age group, accounted for 460 of the 1,098 dwelling units approved for construction since 1993. The High Street project proposed on Richmond Road is expected to add another 248 units to that market. The Quarterpath at Williamsburg development proposed by Riverside Health System will contain 300 units of age-restricted housing (single and multi-family), plus a nursing home and assisted living facility.

Table 4-3 shows population distributions by percentage for the Williamsburg region, Hampton Roads, and Virginia. With the exception of Williamsburg itself, all three areas show a similar concentration of residents in the 35-44 age category ranging from 16.4% to 17% of the total population. The City of Williamsburg has a comparatively low percentage of residents in the 35-44 age group at just over 8% of the population, but a much greater concentration of college-age residents. Figure 4-4 illustrates the disparity between the Williamsburg population profile and the profiles of the surrounding localities and the state, particularly in the 20-24 age group. The presence of the College of William and Mary ensures a steady and substantial supply of primarily transient residents between the ages of 18 and 24. The College's Strategic Plan: Into the Fourth Century projected increased freshman enrollment in the mid-1990s, up from 1,240 to 1,290 in the 1996-1997 academic year. The College remains interested in maintaining small class sizes, but also plans to become a charter school along with the University of Virginia and Virginia Polytechnic Institute and State University. As part of the charter initiative, the College agreed to accept another 125 transfer students and another 150 graduate and professional students. This represents a modest increase in enrollment, and the College's commitment to maintaining small class sizes indicates that total enrollment will continue to remain relatively stable over the next decade.

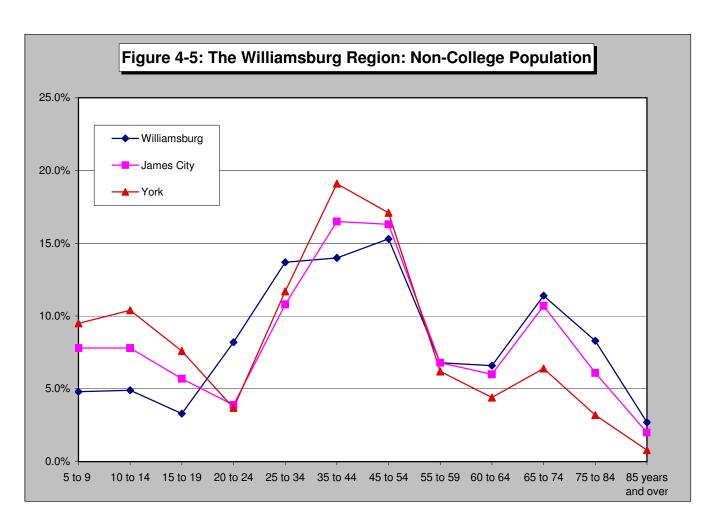
If the population of the Williamsburg region is adjusted to exclude those enrolled in college, the population distribution in the city is more like that of the neighboring counties. Both counties show concentrations of population in the 5-14 and 35-44 age groups, which indicates that more families live there than in the City. Conversely, Williamsburg has a slightly higher percentage of its population that is age 60 and over



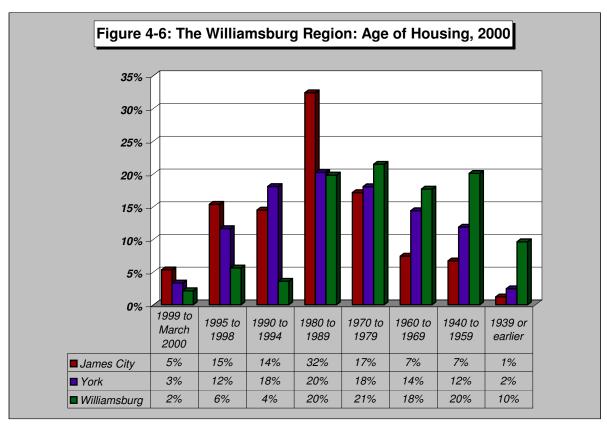
Source: U.S. Bureau of the Census, 2000 Census of Population & Housing, Sample File 3.

Table 4-3: Willia	Table 4-3: Williamsburg and the Region: Population Age Groups												
													85
													years
	Under		10 to	15 to	20 to	25 to	35 to	45 to	55 to	60 to	65 to	75 to	and
	5 years	5 to 9	14	19	24	34	44	54	59	64	74	84	over
Williamsburg	2.7%	2.5%	2.6%	18.6%	29.2%	9.7%	8.1%	8.0%	3.6%	3.4%	5.9%	4.3%	1.4%
James City	5.6%	6.6%	7.0%	5.9%	4.6%	11.0%	16.4%	14.6%	6.1%	5.4%	9.5%	5.5%	1.8%
Upper York	5.1%	6.5%	8.3%	7.2%	4.6%	10.7%	16.9%	15.5%	6.1%	4.9%	8.9%	4.2%	1.1%
Hampton Roads	7.0%	7.6%	7.6%	7.4%	8.2%	14.8%	17.0%	12.6%	4.3%	3.4%	5.6%	3.6%	1.0%
Virginia	6.5%	7.0%	7.0%	6.8%	6.8%	14.6%	17.0%	14.1%	5.1%	3.9%	6.1%	3.9%	1.2%

Source: U.S. Census Bureau, 2000 Census of Population and Housing, Summary File 1, 100-Percent Data



Source: U.S. Bureau of the Census, 2000 Census of Population & Housing, Sample File 3.



Source: U.S. Bureau of the Census, 2000 Census of Population & Housing, Detailed Housing Characteristics

The City of Williamsburg is also characterized by its relatively small population of school-aged children. Residents age 17 and under make up only 9.6% of the population in the City, but account for 23.3% and 24.7% in James City and upper York respectively. Among the factors influencing the location of families with young children is the availability and cost of the housing stock within the Williamsburg region. Figure 4-6 shows that both York and James City Counties have seen a much higher number of housing units built since 1989, although the City has a much higher number of housing units over 30 years old. Data from the 2000 Census indicate that 34% of the housing stock in James City County was built between 1990 and March 2000, and that 33% of the housing stock in York County was built during the same period. Conversely, only 12% of Williamsburg's housing stock was built between 1990 and March 2000 while 48% was built before 1970. Despite the comparative lack of newer housing stock in the City, Williamsburg has the highest home values in the region. The median home value in the City was \$182,000 in 2000, 16% higher than the median of \$157,200 in James City County and 22% higher than the median of \$149,100 in York County.

#### Gender

According to the 2000 Census, the population of Williamsburg is 55% female. This represents a slight increase since 1990 when females accounted for 54% of the City's population. Females comprise a higher proportion of the population in Williamsburg than they do in the region or the state, where they make up about 51% of the population as a whole (Table 4-4). The increasingly higher number of female residents in the City can be attributed in part to higher proportions of college age and elderly residents.

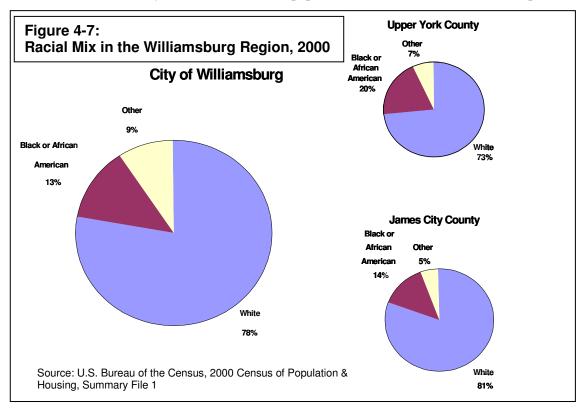
Table 4-4: Williamsburg and the Region: Sex of Population										
	Total Population	Male	% of Total	Female	% of Total					
Williamsburg	11,998	5,382	44.90%	6,616	55.10%					
James City	48,102	23,294	48.40%	24,808	51.60%					
York	56,297	27,650	49.10%	28,647	50.90%					
Hampton Roads	1,533,192	755,400	49.30%	777,792	50.70%					
Virginia	7,078,515	3,471,895	49.00%	3,606,620	51.00%					

Source: U.S. Bureau of the Census, 2000 Census of Population & Housing, Summary File 1

According to the National Center for Education Statistics, the enrollment of women in college increased by 14% from 1990 to 2000, from 7.5 million to 8.6 million. Another 18% increase is expected by 2012, up to 10.1 million or 57% of enrollment. Women accounted for 56% of all college students in 2000, up slightly from 55% in 1990. At the College of William and Mary, the NCES reported an undergraduate female enrollment of 56.2% in Fall 2003. Longer life spans among women help account for the higher number of elderly females in Williamsburg.

#### Race

Williamsburg remains predominantly white according to the 2000 Census. Whites accounted for approximately 78% of the total population in 2000, down slightly from 80% in 1990. African-Americans make up the most prominent minority group at 13% of the population while all other minorities account for nine percent of the total. Figure 4-7 illustrates that the localities in the Williamsburg region have similar racial mixes, each with a primarily white population. According to the 2000 Census, James City County has the largest white population in the region at 81% while upper York County has the largest African-American community at 20% of the total population. African-Americans make up the largest



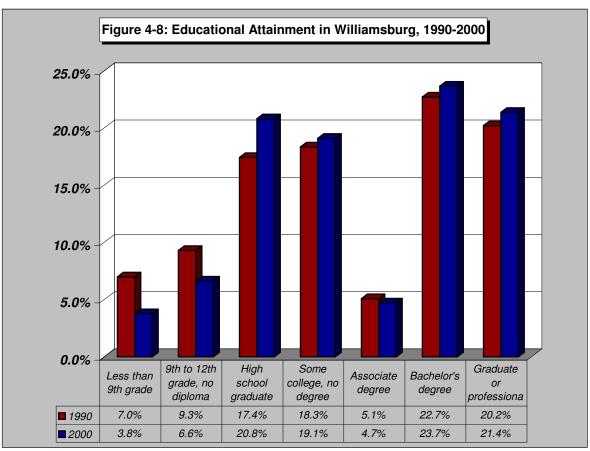
minority population in each locality, and all other racial groups range from 5% of the population in James City County to 9% of the population in Williamsburg.

There has been some change in the racial makeup of Williamsburg since the 1990 Census. At that time, African-Americans accounted for 15% of the population and other minorities made up only 5% of the total. Since then, the percentage of both whites and African-Americans as a part of the total population declined by 2% each. Meanwhile, the percentage of all other minorities rose by 4%. Two most important changes happened in the Asian and Hispanic populations. The Asian population rose 67% from 1990 to 2000, up from 329 to 549 persons, and now accounts for 4.8% of the population. The Hispanic population increased by 100% during the period, up from 151 to 302 persons, and now accounts for 2.5% of the total population.

#### SCHOOL ENROLLMENT AND EDUCATIONAL ATTAINMENT

Williamsburg's population is highly educated, according to the 2000 Census. Of the population twenty-five and over, 90% have at least a high school diploma as compared to 84% in 1990 (Figure 8). Additionally, 45% of the population twenty-five and over have bachelor's degrees or above, up from 43% in 1990. In contrast, those holding bachelor's degrees or higher account for only 24% of the Hampton Roads population and 30% of the Virginia population.

Table 4-5 illustrates school enrollment in the Williamsburg region. Because the City has a relatively low number of school-aged children, only 8% of the population enrolled in school is in grades K-12 compared with 20% in James City County and 25% in York County. However, students in college or graduate school make up 85% of the total Williamsburg population enrolled in school, as compared with 19% in James City County and 18% in York County.



Source: U.S. Bureau of the Census, 2000 Census of Population and Housing

Table 4-5: The Williamsburg Region, 2000: School Enrollment										
	Total population 3 years & over enrolled in school	Nursery school, preschool	Kindergarten	Elementary school (grades 1-8)	High school (grades 9- 12)	College or graduate school	Percent enrolled in college or graduate school			
Williamsburg	6,365	130	26	582	224	5,403	84.9%			
James City	11,808	901	653	5,403	2,574	2,277	19.3%			
York	17,228	1,288	972	7,935	3,967	3,066	17.8%			
Hampton Roads	432,090	28,576	23,789	190,318	88,318	101,089	23.4%			
Virginia	1,868,101	125,701	101,127	806,445	384,053	451,050	24.1%			

Source: U.S. Bureau of the Census, 2000 Census of Population & Housing

# **PROJECTIONS**

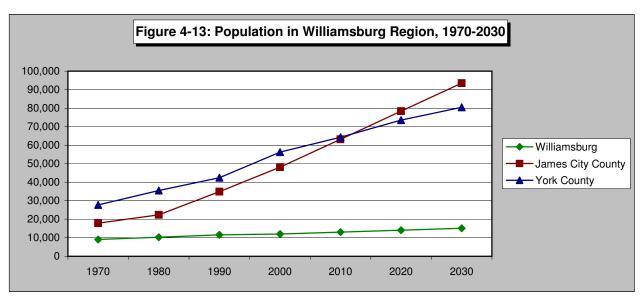
# **Population Growth**

Population projections prepared for the Williamsburg region by the Hampton Roads Planning District Commission (HRPDC) indicate that strong growth will continue through 2030 (Table 4-10). At an average annual rate of 1.1%, the Peninsula's population is projected to grow by a total of 34% between 2000 and 2030. According to HRPDC forecasts, James City County is projected to be the fastest growing locality on the Peninsula with an average annual growth rate of 3.1% and a total growth of 94% by 2030. Moreover, James City County is projected to surpass York County as the most populous locality in the Williamsburg region by 2030 with an estimated population of 93,500 (Figure 4-13). York County is expected to grow at an average annual rate of 1.4% or about 43% over the same period, and is expected to have a total projected population of 80,500 by 2030. Although their projected growth rates exceed the rest of the Peninsula, both James City and York Counties are expected to experience slower growth than that seen in the thirty years from 1970 to 2000 when they had average annual growth rates of 5.6% and 3.4% respectively.

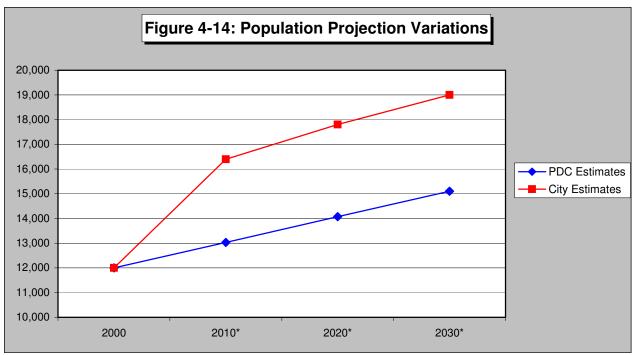
Table 4-10: Population in Hampton Roads 1970-2030										
	1970	1980	1990	2000	2010*	2020*	2030*			
Peninsula	333,140	364,449	435,197	489,877	495,491	501,105	658,300			
James City Co.	17,853	22,339	34,970	48,102	63,235	78,368	93,500			
Williamsburg	9,069	10,294	11,409	11,998	13,032	14,066	15,100			
York Co.	27,762	35,463	42,434	56,297	64,365	73,549	80,500			
Hampton Roads	1,108,393	1,213,999	1,454,183	1,575,348	1,729,732	1,899,246	2,038,900			

\*Based on HRPDC projections

Source: HRPDC Hampton Roads 2000 Socioeconomic Forecast



Based on regional population projections developed by the Hampton Roads Planning District Commission in 2004, the City's growth rate was expected to follow the trend seen in the rest of the region, declining from a 32% population growth between 1970 and 2000 to a projected growth of 26% over the period from 2000 to 2030 (the regional growth rates were 42% and 29%, respectively). However, some recent revisions have been made to the population projections for Williamsburg and the Weldon-Cooper Center now estimates the City's population at 13,400 for 2004. Based on this figure and



because of recent growth in the local housing market and the addition of two major development projects (High Street and Quarterpath at Williamsburg), the City now projects a significantly higher population growth rate, reaching a population of 16,600 by 2010 and 19,000 by 2030. Figure 4-14 illustrates the variation in these population projections for the City. The City's 2010 figure is 27% higher than the previous HRPDC estimate of 13,032 persons, and the 2030 estimate is 26% higher than the HRPDC

projection. This means that the City's 32% population growth between 1970 and 2000 will increase to a projected growth of 58% over the period from 2000 to 2030. The City estimates indicate that Williamsburg will maintain a steady share of the population in the Williamsburg region through 2030, remaining at about ten percent of the projected total population of 189,100.

The City of Williamsburg will also see a shift in the composition of its population. With relatively steady enrollment levels expected at the College of William and Mary, the number of college-age residents in Williamsburg is expected to remain stable while the overall population grows. The result will be a decline in the college-age population as a percentage of the total population over the next 30 years. Data from the Virginia Employment Commission indicate the 15-24 age groups accounted for about 50% of the Williamsburg population in 1990. That percentage is projected to decline to about 44.6% by 2030. Conversely, the number of residents 65 and over is expected to increase by about 54% during the same period, up from about 12% of the total population in 1990 to approximately 15% of the total population in 2030. This trend has been recognized as a significant factor in determining future development plans in the City.

#### Households

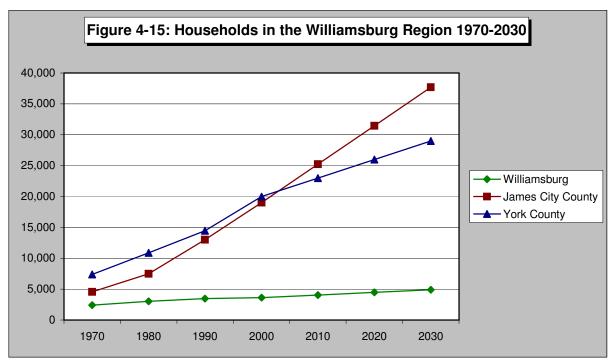
Household trends based on occupied housing data for the Williamsburg region during the period from 1970 to 2000 are provided in Table 4-11, along with projections for 2030. The number of households in the City increased by 51% from 1970 to 2000, with 26% of that increase coming in the 1970s and another 18% in the 1980s. The surrounding counties grew at a much higher rate from 1970 to 2000 – the number of households was up 318% in James City County and 171% in York County. During the 1990s, household growth slowed dramatically in Williamsburg, increasing by just 4.5% in the City while the overall number of households in Hampton Roads increased by fifteen percent in the same decade. Although the remainder of the Williamsburg region also added fewer households during the 1990s than in the previous two decades, both of the surrounding counties continued to outpace growth in the City. The number of households increased by 46% in James City County and by 38% in York County in the 1990s.

Based on projections developed by the HRPDC, the number of households in Williamsburg is expected to increase to 4,900 by 2030, up 35% from 2000. This percent increase is slightly greater than the increase anticipated for the Hampton Roads region as a whole (32%), but remains significantly smaller than the 45% increase projected for York County and substantially less than the 98% increase projected for James City County (Figure 4-15). As with the population growth estimate, the number of households projected for the City may be higher than previously projected. Based on the City's revised population estimate, there may be up to 6,793 households in Williamsburg by 2030. This would represent an 87% increase in the number of households since 2000 and would considerably outpace household growth in York County, although the City would not reach the pace of growth projected for James City County. Despite the additional projected growth, the number of households in the City would still account for only 9% of the total in the Williamsburg region by 2030.

Average household size is also expected to decline in the Williamsburg region, particularly as the population ages. Forecasts provided by the HRPDC indicate that the average household size in Williamsburg will fall to 2.06 in 2030, down slightly from 2.07 in 2000. Average household size will fall to 2.44 in James City County and 2.75 in York County by 2030, down from 2.47 and 2.78 respectively. Average household size in Hampton Roads is projected to be 2.57 in 2030.

Table 4-11: Regional Forecast 2030: Households in Hampton Roads										
	1970	1980	1990	2000	2030					
Williamsburg	2,396	3,024	3,462	3,619	4,900					
James City County	4,551	7,493	12,990	19,003	37,700					
York County	7,391	10,879	14,452	20,000	29,000					
Hampton Roads	NA	390,531	504,180	579,107	764,200					

Source: HRPDC, Hampton Roads 2030 Socioeconomic Forecast



Source: HRPDC, Hampton Roads 2030 Socioeconomic Forecast

# **Residential Housing Requirements**

Population projections for Williamsburg indicate that an additional 3,102 people will live in the City by 2030. With an average household size of 2.06, another 1,506 dwelling units will be required to house the population. City estimates indicate that up to 5,400 additional residents will live in the City by 2030, which would require another 2,621 dwellings units. Because the population is aging, much of the required new housing is likely to be in the form of multi-family townhouses, condominiums, or apartments. These may be located in mixed-use developments with shops and services within walking distance. Plans for the development of High Street Williamsburg already include 580 multi-family housing units as part of an upscale lifestyle center to be located off Richmond Road in the western part of the City. Quarterpath at Williamsburg, being planned and developed by Riverside Health System, will include approximately 955 houses. Of these, 760 will be townhouses and condominiums.

# **Projection Methodology**

Population and household projections for the Williamsburg region are contained in the Hampton Roads Planning District Commission's 2030 Socioeconomic Forecast. These numbers are produced using the REMI forecast model developed by the University of Massachusetts, which is widely used and updated annually. The model provides baseline forecasts for the Hampton Roads area that are then reviewed and adjusted by HRPDC staff. Projections for population, employment, and the retail trade are produced using this data. Individual community growth rates are assigned based on the growth increments agreed upon in the 2026 projections, and the total projected growth of the region is distributed among the localities. The forecasts are then reviewed by individual localities to reflect trends in specific areas, with additional adjustments made based on the data they provide. Econometric procedures are used to produce forecasts for additional data categories, based on the adjusted baseline data. The result is a reliable regional forecast that reflects specific local trends.

Since the preparation of the 2030 Socioeconomic Forecast in 2004, there have been significant changes in proposed residential construction in the City. Subsequently, the Williamsburg Planning Department developed new population forecasts based on both proposed and approved developments as well as the capacity for new development and redevelopment on properties throughout the City. This results in a forecast that is specific to the community and reflects current development plans.

